(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau





(43) International Publication Date 1 April 2004 (01.04.2004)

PCT

(10) International Publication Number WO 2004/026096 A2

(51) International Patent Classification⁷:

A47L

(21) International Application Number:

PCT/US2003/026302

(22) International Filing Date:

22 September 2003 (22.09.2003)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

60/411,760

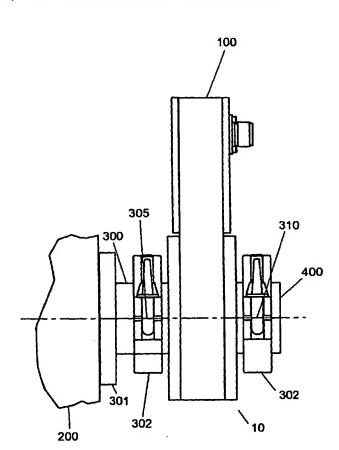
19 September 2002 (19.09.2002) US

- (71) Applicant (for all designated States except US): TOKYO ELECTRON LIMITED [JP/JP]; TBS Broadcast Center, 3-6, Akasaka 5-chome, Minato-ku, Tokyo 107-8481 (JP).
- (72) Inventor; and
- (75) Inventor/Applicant (for US only): FINK, Steven, T. [US/US]; 4609 E. Gable Circle, Mesa, AZ 85206 (US).

- (74) Agent: MAIER, Gregory, J.; Oblon, Spivak, McClelland, Maier & Neustadt, P.C., 1940 Duke Street, Alexandria, VA 22314 (US).
- (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

[Continued on next page]

(54) Title: VIEWING WINDOW CLEANING APPARATUS



(57) Abstract: A viewing port for a processing chamber is provided that includes a viewing window cleaning apparatus, a viewing window, and a mounting, where the viewing window cleaning apparatus is coupled to the mounting and disposed between the viewing window and the process chamber, and is configured to form a cleaning plasma in a cleaning plasma region of the mounting. In addition, the mounting can be configured to reduce a number of by-products from a process chamber on the viewing window by preventing them from propagating to the window.

Published:

 without international search report and to be republished upon receipt of that report For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.